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EXAMINER	
KIM, CHRISTOPHER S	
ART UNIT	**PAPER NUMBER**
3752	

MAIL DATE	DELIVERY MODE
12/31/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/768,263	WARD ET AL.	
	Examiner	Art Unit	
	Christopher S. Kim	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-9,11-14 and 16-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-9,11-14 and 16-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The response filed September 15, 2008 is acknowledged.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1, 3, 5-7, 9, 11, 12 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hinchman (2,517,877).

Regarding claim 1,

Hinchman discloses an adjustable gas nozzle comprising:

a nozzle body member 8;

a conduit 7;

an adjusting member 25, 26 having:

a first end 25 with a first restricted orifice (orifice of 29 upstream of 27);

a second end 26 having a second orifice (upstream end of bore 33);

said first and second ends having a first passage 29, 33;

a coupling 16;

a by-pass passageway 18;

cooperative surfaces 19, 27;

cooperating means 12, 32;

a seal 15, 17.

The first position of Hinchman is where lock nut 32 is securely seated against seat 15 so that threads 12 and 30 are sealed.

The second position of Hinchman is where lock nut 32 is unseated from seat 15 so the threads 12 and 30 are loose so fluid is permitted to pass therebetween and the adjusting member 25 is retracted from seat 19. Fluid escaping between threads 12 and 30 is permitted into by-pass passageway 18 and through slits 27.

The coupling 16 between said conduit 7 and said nozzle body member 8 permits first and second alternative positions of the adjusting member 25, 26 between the conduit 7 and the nozzle body member 8.

The nozzle body member 8 is movable into said second position relative to said conduit 7 because the nozzle body member 8 must be removed to loosen lock nut 32 and then the nozzle body member 8 must be replaced onto the conduit 7.

While Hinchman may not have been intended to be used with lock nut 32 loosened, Hinchman is capable of performing the functional recitation.

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. MPEP 2114.

Claim 1 has been amended to add the recitation “wherein the first position is configured to provide sufficient gas flow for use with propane and the second position is

configured to provide sufficient gas flow for natural gas usage for a selected downstream application in which significantly more natural gas would be required than propane for similar performance." The recitation "configured to…" merely requires the ability to so perform. Additionally, the recitations "for use" and "for natural gas usage" merely indicated the intended use and do not constitute positively recited limitations.

Regarding claims 3 and 9,

While Hinchman does not disclose the material of conduit 7 or nozzle body member 8, figure 1 of Hinchman shows different crosshatching for conduit 7 and nozzle body member 8 indicating different materials. Therefore, one material is inherently harder than the other.

Regarding claims 5 and 11,

The seal 15, 17 is located intermediate the coupling 16 and the outlet (downstream end of nozzle body member 8).

Regarding claim 6,

The first restricted orifice (orifice of 29 upstream of 27) is smaller than and coaxial with the outlet (downstream end of nozzle body member 8).

Regarding claims 7 and 12,

The cooperating means 12, 32 includes an annular shoulder (seat 15 for lock nut 32) about an anterior wall 15. Hinchman further discloses a plurality of legs (the six points of hex nut 32).

Regarding claim 17,

Hinchman discloses an adjustable gas nozzle comprising:

a nozzle body member 8;

a conduit 7;

an adjustment member 26 having:

a first non-adjustable restricted orifice (downstream end opening/orifice of passage 33) at the terminal end 31 of the adjustment member 26 proximate to the second end 20 of the nozzle body member 8;

a coupling 16;

a by-pass passageway 18;

cooperative surfaces (mating surfaces between head 31 and sleeve 25);

cooperating means 12, 32;

an integral seal 15, 17.

The first position of Hinchman is where lock nut 32 is securely seated against seat 15 so that threads 12 and 30 are sealed.

The second position of Hinchman is where lock nut 32 is unseated from seat 15 so the threads 12 and 30 are loose so fluid is permitted to pass therebetween and the adjusting member 25 is retracted from seat 19. Fluid escaping between threads 12 and 30 is permitted into by-pass passageway 18 and through slits 27.

The coupling 16 between said conduit 7 and said nozzle body member 8 permits first and second alternative positions of the adjusting member 26 between the conduit 7 and the nozzle body member 8.

The nozzle body member 8 is movable into said second position relative to said conduit 7 because the nozzle body member 8 must be removed to loosen lock nut 32 and then the nozzle body member 8 must be replaced onto the conduit 7.

While Hinchman may not have been intended to be used with lock nut 32 loosened, Hinchman is capable of performing the functional recitation.

While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. MPEP 2114.

Claim Rejections - 35 USC § 103

4. Claims 1, 3, 5-7, 9, 11, 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridenour (5,025,990) in view of Ito (4,432,496).

Regarding claims 1 and 17,

Ridenour discloses an adjustable gas nozzle comprising:

a nozzle body member 12;

a conduit 13;

an adjustment member 14;

a coupling 13 (threads);

a by-pass passageway 35;

cooperative surfaces 22,25;

cooperating means 31, 32, 33.

Ridenour differs from what is being claimed in the seal being distinct from the coupling. Ito teaches an integral seal 28 between the conduit 27 and nozzle body member 41. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the seal/locking bulges 28, 45 of Ito to the device of Ridenour to prevent accidental removal of the nozzle body member.

Although Ito describes, in column 4, lines 57-66, element 28 as an “outer annular budge" and element 45 as an "inner annular engaging bulge" rather than a "seal," Figure 2 shows element 28 in contact with nozzle body member 41 in both the first and second positions (left and right halves, respectively, of figure 2). Therefore, Ito's element 28 inherently provides a sealing function in addition to its locking feature.

Claim 1 has been amended to add the recitation “wherein the first position is configured to provide sufficient gas flow for use with propane and the second position is configured to provide sufficient gas flow for natural gas usage for a selected downstream application in which significantly more natural gas would be required than propane for similar performance.” The recitation “configured to…” merely requires the ability to so perform. Additionally, the recitations "for use" and "for natural gas usage" merely indicated the intended use and do not constitute positively recited limitations.

Regarding claims 3 and 9,

Ridenour discloses, in column 2, line 67 through column 3, line 1, the conduit 13 made of aluminum and the nozzle body member 12 made of brass

Regarding claims 5 and 11,

Ito teaches that the seal 28 is located intermediate the coupling 45a and the outlet 42 of nozzle body member 41.

Regarding claim 6,

Ridenour discloses, in figure 1, the first restricted orifice 27 is smaller than and coaxial with the outlet 21 the nozzle body member 12.

Regarding claims 7 and 12,

Ridenour discloses the cooperating means 31, 32, 33 includes an annular shoulder 32 about an anterior wall of conduit 13. Hinchman further discloses a plurality of legs 31.

5. Claims 1-3, 5-9, 11-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridenour (5,025,990) in view of Kuiken (3,116,880).

Regarding claims 1, 2, 8, 13, 17 and 18,

Ridenour discloses an adjustable gas nozzle comprising:

a nozzle body member 12;

a conduit 13;

an adjustment member 14;

a coupling 13 (threads);

a by-pass passageway 35;

cooperative surfaces 22, 25;

cooperating means 31, 32, 33.

Ridenour differs from what is being claimed in the seal being distinct from the coupling. Kuiken teaches an integral seal ribs 84 on conduit 48 distinct from coupling

80, 82 located intermediate the coupling 82 and the outlet 70 of nozzle body member 16. The seal ribs 84 are integral with the conduit 48 because the seal ribs 84 are constituent or component parts of the conduit 48. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the seal ribs of Kuiken to the device of Ridenour to improve the seal and reduce leaks.

Claim 1 has been amended to add the recitation “wherein the first position is configured to provide sufficient gas flow for use with propane and the second position is configured to provide sufficient gas flow for natural gas usage for a selected downstream application in which significantly more natural gas would be required than propane for similar performance.” The recitation “configured to…” merely requires the ability to so perform. Additionally, the recitations "for use" and "for natural gas usage" merely indicated the intended use and do not constitute positively recited limitations.

Regarding claims 3, 9, 14 and 19,

Ridenour discloses, in column 2, line 67 through column 3, line 1, the conduit 13 made of aluminum and the nozzle body member 12 made of brass

Regarding claims 5, 11, 16 and 20,

Kuiken teaches that the seals 84 is located intermediate the coupling 82 and the outlet 70 of nozzle body member 16.

Regarding claim 6,

Ridenour discloses, in figure 1, the first restricted orifice 27 is smaller than and coaxial with the outlet 21 the nozzle body member 12.

Regarding claims 7 and 12,

Ridenour discloses the cooperating means 31, 32, 33 includes an annular shoulder 32 about an anterior wall of conduit 13. Ridenour further discloses a plurality of legs 31.

6. Claims 1-3, 5-9, 11-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridenour (5,025,990) in view of Kachergis (2,944,743).

Regarding claims 1, 2, 8, 13, 17 and 18,

Ridenour discloses an adjustable gas nozzle comprising:

a nozzle body member 12;

a conduit 13;

an adjustment member 14;

a coupling 13 (threads);

a by-pass passageway 35;

cooperative surfaces 22, 25;

cooperating means 31, 32, 33.

Ridenour differs from what is being claimed in the seal being distinct from the coupling. Kachergis teaches an integral seal 35, 36, 37 comprising ribs 35 on conduit 20 distinct from coupling 26 located intermediate the coupling 26 and the outlet (opening formed by flange 29 and washer 28) of nozzle body member 21. The seal 35, 36, 37 is integral with conduit 20 because seal rib 35 is one piece with conduit 20 and elements 35, 36, 37 are constituent or component parts of the conduit 20. It would have been obvious to a person having ordinary skill in the art at the time of the invention to

have provided the seal ribs of Kachergis to the device of Ridenour to improve the seal and reduce leaks.

Claim 1 has been amended to add the recitation “wherein the first position is configured to provide sufficient gas flow for use with propane and the second position is configured to provide sufficient gas flow for natural gas usage for a selected downstream application in which significantly more natural gas would be required than propane for similar performance.” The recitation “configured to…” merely requires the ability to so perform. Additionally, the recitations "for use" and "for natural gas usage" merely indicated the intended use and do not constitute positively recited limitations.

Regarding claims 3, 9, 14 and 19,

Ridenour discloses, in column 2, line 67 through column 3, line 1, the conduit 13 made of aluminum and the nozzle body member 12 made of brass

Regarding claims 5, 11, 16 and 20,

Kachergis teaches that the seal 35, 36, 37 is located intermediate the coupling 20 and the outlet (opening formed by flange 29 and washer 28) of nozzle body member 21.

Regarding claim 6,

Ridenour discloses, in figure 1, the first restricted orifice 27 is smaller than and coaxial with the outlet 21 the nozzle body member 12.

Regarding claims 7 and 12,

Ridenour discloses the cooperating means 31, 32, 33 includes an annular shoulder 32 about an anterior wall of conduit 13. Ridenour further discloses a plurality of legs 31.

Response to Arguments

7. Appellant's arguments filed February 25, 2008 have been fully considered but they are not persuasive

Applicant argues the functional differences of Hinchman. Functional recitations of the claimed invention has been considered to require the ability to perform. It does not constitute a positively recited limitation. Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. MPEP 2114.

Regarding claim 17, Hinchman discloses an adjustment member 26 having a first non-adjustable restricted orifice (downstream end opening/orifice of passage 33) at the terminal end 31 of the adjustment member 26 proximate to the second end 20 of the nozzle body member 8.

Applicant argues that Ito is not directed to combustible gas. Ito is reasonably pertinent to the particular problem with which the applicant was concerned, i.e., seals.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571) 272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher S. Kim/
Primary Examiner, Art Unit 3752

CK